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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,869	02/28/2006	Futoshi Nomura	00250.000034	9753

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EXAMINER

HUANG, CHENG YUAN

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/569,869	Applicant(s) NOMURA ET AL.	
	Examiner CHENG HUANG	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20061128, 20060509</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 4, 5, 8-12 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim must refer back in the alternative only. See MPEP § 608.01(n). Accordingly, the claims 4, 5, 8-12 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding the phrase “[an adhesive layer] on a side opposite to a light-entering side of the retroreflective sheeting”, it is rather unclear as to where the exact location of the claimed adhesive layer should be since "a light-entering side" may be considered to be either side of the retroreflective sheeting. For the purposes of examination, the claimed adhesive layer is considered to be on either side of the retroreflective sheeting.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hingsen-Gehrmann et al. (U.S. Patent Application Publication No. 2002/0142121) in view of Yamamoto et al. (U.S. Patent Application Publication No. 2002/0135735).

7. Regarding claims 1 and 3, Hingsen-Gehrmann et al. teaches a retroreflective sheeting (See title) comprising a surface layer (carrier 22, paragraph [0038], Fig. 1) and retroreflective element layer (space coat 33, layer of lenses 34, and lens coat 35, paragraphs [0042]-[0044], Fig. 1), with at least one destructive layer (release layer 32, paragraph [0041], Fig. 1) provided between the surface and retroreflective element layers (Fig. 1). The surface layer of Hingsen-Gehrmann teaches the surface layer of the presently claimed invention since the carrier layer 22 of Hingsen-Gehrmann is, in fact, a surface layer to underlying layers such as reflective layer 31 ([paragraph 0044], Fig. 1). Furthermore, in addition to being identical in structure, the surface layer of Hingsen-Gehrmann and that of the present invention comprise identical materials of acrylic polymers, polyvinyl chloride, polyurethanes, and polystyrene (Hingsen-Gehrmann, paragraph [0065]).

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8. Hingsen-Gehrmann et al. teaches said destructive layer being polyester or polyacrylate resins (paragraph [0059]) but fails to teach the destructive layer being an alicyclic polyolefin resin or alicyclic acrylic resin.
9. However, Yamamoto et al. teaches an optical article (See title) comprising a principal chain hydrocarbon having an adamantane ring or a cyclopentane ring (paragraph [0043]) which are alicyclic polyolefin resins. In addition, Yamamoto et al. teaches the use of polyester or acrylics (paragraph [0043]), which, in doing so, teaches the functional equivalence between hydrocarbon resins based on cyclical residues and polyester and acrylic resins.
10. Since both Hingsen-Gehrmann et al. and Yamamoto et al. teach inventions drawn to optical articles, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the hydrocarbon resin-based cyclical residues of Yamamoto et al. in the destructive layer of Hingsen-Gehrmann et al. as a known functional equivalent of polyester and acrylic resins since Yamamoto et al. teaches that various polymers, including polyesters and acrylic resins may be used, along with alicyclic polyolefin resins. Substitution of known components with other components that yield predictable results would have been obvious to one of ordinary skill in the art since predictable characteristics such as optical clarity, toughness, and heat resistance (paragraph [0044]) would have been affected by using alicyclic polyolefin resins or polyester or acrylic resins in the destructive layer of optical articles. See MPEP 2144.06 II.
11. The functional limitation “wherein, when the retroreflective sheeting has been applied to a substrate and is removed, peeling takes place at the interface of the destructive layer and the layer which is in intimate contact therewith and/or by destruction of the destructive layer” is considered to define the particular capability of the retroreflective sheeting to be applied to a

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substrate and the destructive layer to peeling and/or destruct. Since the structure and materials of the retroreflective sheeting of Hingsen-Gehrmann et al. as modified by Yamamoto et al. are identical to those of the presently claimed invention, when the invention is applied to substrate and removed, the peeling would intrinsically take place at the interface of the destructive layer and the layer which is in intimate contact therewith and/or by destruction of the destructive layer as presently claimed. Furthermore, Hingsen-Gehrmann et al. teaches the application of the retroreflective sheeting to a substrate (substrate 90, paragraph [0072], Fig 2 & Fig. 4) and the subsequent peeling and destruction of the destructive layer (paragraph [0072]).

12. Regarding claim 2, Hingsen-Gehrmann et al. teaches a retroreflective sheeting (See title) comprising an adhesive layer (adhesive 21, paragraph [0037], Fig. 1) on a side (paragraph [0069], Fig. 1), which is considered to be either top or bottom sides of the sheeting, in light of the 35 U.S.C. 112 rejection made above, and would satisfy a side "opposite to a light-entering side of the retroreflective sheeting." Furthermore, in the instance where the adhesive layer is to be located opposite the side of adhesive layer 21, Hingsen-Gehrmann et al. also teaches the placement of adhesive layer located opposite the side of adhesive layer 21, specifically "near the layer of lenses and distant to the reflective layer of the retroreflective sheet" (paragraph [0070]).

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re*

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Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1, 2, and 3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application

No.10/590982. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of copending Application No.10/590982 shows all the features of the instantly claimed invention including a surface layer (surface-protective layer), retroreflective element layer (light-reflective resin sheet), adhesive layer (substrate-adhesive layer), and a destructive layer which is comprised of alicyclic polyolefin or alicyclic acrylic resins. Although copending Application No.10/590982 contains additional features (e.g. information display layer), in light of the open language of present claims (i.e. “comprising”), the inclusion of additional features is allowed.

15. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. Claims 1, 2, and 3 directed to an invention not patentably distinct from claim 1 of commonly assigned copending Application No.10/590982. Although the conflicting claims are not identical they are not patentably distinct for the reasons set forth in paragraph 14 above.

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17. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300).

Commonly assigned copending Application No.10/590982, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

18. A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHENG YUAN HUANG whose telephone number is (571) 270-7387. The examiner can normally be reached on Monday-Thursday from 8 AM to 4 PM.

20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho, can be reached at 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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21. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. H./

Cheng Yuan Huang

Examiner, Art Unit 1794

April 27, 2009

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1794